TITLE 10 -- DEPARTMENT OF NATURAL RESOURCES
DIVISION 60 – SAFE DRINKING WATER COMMISSION
Chapter 2 – Definitions

PROPOSED AMENDMENT

10 CSR 60-2.015 Definitions. The commission is amending subsection (2)(C), (2)(L), and (2)(S).

PURPOSE: This amendment adopts definitions promulgated in the U.S. Environmental Protection Agency's Revisions to the Total Coliform Rule (RTCR) (78 Federal Register 10269). These definitions include clean compliance history, level one and level two assessments, sanitary defect, and seasonal system.

(2) Definitions.

(C) Terms beginning with the letter C.

1. Cartridge filters. Pressure-driven separation devices that remove particulate matter larger than one (1) micrometer using an engineered porous filtration media. They are typically constructed as rigid or semi-rigid, self-supporting filter elements housed in pressure vessels in which flow is from the outside of the cartridge to the inside.

2. Certificate. The certificate of competency issued by the department stating that a person has met the requirements for the specified operator classification of the certification program under the provisions of 10 CSR 60-14.020.

3. Certificate of examination. A certificate issued to a person who passes a written examination but does not meet the experience requirements for the classification of examination taken.

4. Chief operator. The person designated by the owner of a public water system to have direct, on-site responsibility for the operation of a water treatment plant or water distribution system, or both.

5. Chloramines. All amino or imino groups in which the hydrogen has been replaced totally or in part by chlorine.

6. Class I backflow hazard. See backflow hazard.

7. Class II backflow hazard. See backflow hazard.

8. Clean compliance history is, for the purposes of 10 CSR 60-4.022, a record of no MCL or monitoring violations under 10 CSR 60-4.020; no monitoring violations; and no coliform treatment technique trigger exceedances or treatment technique violations under 10 CSR 60-4.022.

*[8]***9**. Coagulation. A process using coagulant chemicals and mixing by which colloidal and suspended materials are destabilized and agglomerated into flocs.

*[9]***10**. Combined chlorine residual. That portion of the total chlorine residual which is not free available chlorine.

*[10]***11**. Combined distribution system. The interconnected distribution system consisting of the distribution systems of wholesale systems and of the consecutive systems that receive finished water.

*[11]***12**. Community water system. A public water system which serves at least fifteen (15) service connections and is operated on a year-round basis or regularly serves at least twenty-five (25) residents on a year-round basis.

*[12]***13**. Compliance cycle. The nine (9)-year calendar year cycle during which public water systems must monitor. Each compliance cycle consists of three (3), three (3)-year compliance periods. The first calendar year cycle begins January 1, 1993 and ends December 31, 2001; the second begins January 1, 2002 and ends December 31, 2010; and the third begins January 1, 2011 and ends December 31, 2019.

*[13]***14**. Compliance period. A three (3)-year calendar year period within a compliance cycle. Each compliance cycle has three (3), three (3)-year compliance periods. Within the first compliance cycle, the first compliance period runs from January 1, 1993 to December 31, 1995; the second from January 1, 1996 to December 31, 1998; and the third from January 1, 1999 to December 31, 2001.

*[14]***15**. Confluent growth. A continuous bacterial growth covering the entire filtration area of a membrane filter, or a portion of the area, in which bacterial colonies are not discrete.

*[15]***16**. Consecutive system. A public water system that receives some or all of its finished water from one (1) or more wholesale systems. Delivery may be through a direct connection or through the distribution system of one (1) or more consecutive systems.

*[16]***17**. Consolidated formations. Earth material which has been created by geological processes, cemented, or compacted into a coherent or firm mass.

*[17]***18**. Containment. Protection of the public water system by installation of a department-approved backflow prevention assembly or air-gap separation at the user connection from the main service line(s).

*[18]***19**. Contaminant. Any physical, chemical, biological, or radiological substances or matter in water including, but not limited to, those substances for which maximum contaminant levels are established by the department.

*[19]***20**. Conventional filtration treatment. A series of treatment processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal.

A. Required treatment for ground water systems under the direct influence of surface water. One (1) stage of treatment must be provided as follows: rapid mix, flocculation, and sedimentation followed by filtration. Disinfection also shall be provided. Raw water quality characteristics may require additional treatment.

B. Required treatment for surface water systems. Two (2) stages of treatment must be provided as follows: primary rapid mix, flocculation, and sedimentation followed by secondary rapid mix, flocculation, and sedimentation, operated in series, followed by filtration and disinfection contact storage. Raw water quality characteristics may require additional treatment.

*[20]***21**. Corrosion inhibitor. A substance capable of reducing the corrosivity of water toward metal plumbing materials, especially lead and copper, by forming a protective film on the interior surface of those materials.

*[21]***22**. Cross-connection. Any actual or potential connection or structural arrangement between a public water system and any other source or system through which it is possible to introduce into any part of the public water system any used water, industrial fluid, gas, or substance other than the intended potable water with which the system is supplied. By-pass arrangements, jumper connections, removable sections, swivel or change-over devices, and other temporary or permanent devices through which or because of which, backflow can or may occur are considered to be cross-connections.

*[22]***23**. CT. The product of the residual disinfectant concentration (C) in milligrams per liter (mg/l) determined before or at the first customer and the corresponding disinfectant contact time (T) in minutes (that is, C multiplied by T (C × T)). (See also residual disinfectant concentration and disinfectant contact time.)

*[23]***24**. Customer. Any person who receives water from a public water system.

*[24]***25**. Customer service line. The pipeline from the public water system to the first tap, fixture, receptacle, or other point of customer water use or to the first auxiliary water system or pipeline branch in a building.

*[25]***26**. Customer water system. All piping, fixtures, and appurtenances, including auxiliary water systems, used by a customer to convey water on his/her premises.

(L) Terms beginning with the letter L.

1. Lake/reservoir. A natural or man-made basin or hollow on the earth's surface in which water collects or is stored that may or may not have a current or single direction of flow.

2. Lead service line. A service line made of lead which connects the water main to the building inlet and any lead pigtail, gooseneck, or other fitting which is connected to that lead line.

3. *Legionella.* A genus of bacteria some species of which have caused a type of pneumonia called Legionnaires disease.

4. Level 1 assessment is an evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the system triggered the assessment. It is conducted by the system operator or owner. Minimum elements include review and identification of atypical events that could affect distributed water quality or indicate that distributed water quality was impaired; changes in distribution system maintenance and operation that could affect distributed water quality (including water storage); source and treatment considerations that bear on distributed water quality, where appropriate (e.g., whether a ground water system is disinfected); existing water quality monitoring data; and inadequacies in sample sites, sampling protocol, and sample processing. The system must conduct the assessment consistent with any department directives that tailor specific assessment elements with respect to the size and type of the system and the size, type, and characteristics of the distribution system.

5. Level 2 assessment is an evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the system triggered the assessment. A Level 2 assessment provides a more detailed examination of the system (including the system's monitoring and operational practices) than does a Level 1 assessment through the use of more comprehensive investigation and review of available information, additional internal and

external resources, and other relevant practices. It is conducted by an individual approved by the department, which may include the system operator. Minimum elements include review and identification of atypical events that could affect distributed water quality or indicate that distributed water quality was impaired; changes in distribution system maintenance and operation that could affect distributed water quality (including water storage); source and treatment considerations that bear on distributed water quality, where appropriate (e.g., whether a ground water system is disinfected); existing water quality monitoring data; and inadequacies in sample sites, sampling protocol, and sample processing. The system must conduct the assessment consistent with any department directives that tailor specific assessment elements with respect to the size and type of the system and the size, type, and characteristics of the distribution system. The system must comply with any expedited actions or additional actions required by the department in the case of an *E. coli* MCL violation.

*[4]***6.** Lime softening. The application of lime to reduce the concentrations of calcium and magnesium and, to a lesser extent, iron, manganese, or radionuclides from source water.

*[5]***7.** Locational running annual average (LRAA). The average of sample analytical results for samples taken at a particular monitoring location during the previous four (4) calendar quarters.

(S) Terms beginning with the letter S.

1. **Sanitary defect is a defect that could provide a pathway of entry for microbial contamination into the distribution system or that is indicative of a failure or imminent failure in a barrier that is already in place.**

*[1]***2**. Sanitary survey. An on-site engineering inspection and review of a public water system—its supply source(s), treatment of supply source(s), treatment facilities, and distribution system(s), for the purpose of evaluating their adequacy, reliability, and safety for producing and distributing drinking water.

3. Seasonal system is a non-community water system that is not operated as a public water system on a year-round basis and starts up and shuts down at the beginning and end of each operating season.

*[2]***4**. Secondary contaminant levels. Those contaminant levels established by the department for contaminants which may affect the taste, odor, color, staining, and scale-forming tendencies of water.

*[3]***5**. Secondary public water system. A public water system which obtains all its water from an approved public water system(s), consists of a water distribution system, and resells the water or is a carrier which conveys passengers in interstate commerce. Parts of a primary public water system may be classified as being a secondary public water system if they meet this definition and are physically separated from those parts served by the source for the primary public water system.

*[4]***6**. Sedimentation. A process for removal of solids before filtration by gravity separation.

*[5]***7**. Service connection. Any water line or pipe connected to a water distribution main or pipe for the purpose of conveying water to a point of use.

*[6]***8**. Service line sample. A one (1) liter sample of water, collected in accordance with the lead and copper provisions of these rules only, that has been standing for at least six (6) hours in a service line.

*[7]***9**. Single family structure. For the purpose of the lead and copper provisions of these rules only, a building constructed as a single family residence that is currently used as either a residence or a place of business.

*[8]***10**. Subdivision. Any land which is divided or proposed to be divided into fifteen (15) or more lots or tracts, whether contiguous or not, for the purpose of sale, lease, rental, or construction of permanent structures on lots or tracts as part of a common plan; or where subdivided land is offered for sale or lease, or where structures are constructed by a single developer or a group of developers acting in concert and where the lots or land or structures are contiguous or known, designated or advertised as a common unit or by a common name. The lots or land tracts and structures shall be presumed, without regard to the number of lots or dwellings covered by each individual offering, as being offered for sale or lease as part of a common plan.

*[9]***11**. Supplier of water. Any person who owns, controls, or operates a public water system.

*[10]***12**. Surface water. All water which is open to the atmosphere and subject to surface runoff; this includes all tributary streams and drainage basins, natural lakes, and artificial reservoirs above the point of the water supply intake.

*[11]***13**. System with a single service connection. A system which supplies drinking water to consumers via a single service line.

AUTHORITY: section 640.100, RSMo Supp. 2008. Original rule filed May 4, 1979, effective Sept. 14, 1979. Amended: Filed April 14, 1981, effective Oct. 11, 1981. Amended: Filed July 11, 1986, effective Jan. 1, 1987. Amended: Filed June 2, 1988, effective Aug. 31, 1988. Amended: Filed Dec. 4, 1990, effective July 8, 1991. Amended: Filed July 12, 1991, effective Feb. 6, 1992. Amended: Filed March 31, 1992, effective Dec. 3, 1992. Amended: Filed Aug. 4, 1992, effective May 6, 1993. Amended: Filed Dec. 14, 1992, effective Aug. 9, 1993. Amended: Filed May 4, 1993, effective Jan. 13, 1994. Amended: Filed Feb. 1, 1996, effective Oct. 30, 1996. Amended: Filed Jan. 2, 1997, effective Dec. 29, 1997. Amended: Filed Dec. 15, 1999, effective Sept. 1, 2000. Amended: Filed March 17, 2003, effective Nov. 30, 2003. Amended: Filed Feb. 27, 2009, effective Oct. 30, 2009. Amended: Filed Aug. 17, 2015.*

**Original authority: 640.100, RSMo 1939, amended 1978, 1981, 1982, 1988, 1989, 1992, 1993, 1995, 1996, 1998, 1999, 2002, 2006.*

PUBLIC ENTITY COSTS: This amendment is anticipated to cost state agencies and political subdivisions less than $500 in the aggregate.

PRIVATE ENTTY COSTS: This amendment is anticipated to cost private entities less than $500 in the aggregate.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: The Department of Natural Resources Public Drinking Water Branch will hold a public hearing on this proposed rule at 10:00 a.m. on October16, 2015 at the Lewis and Clark State Office Building, 1101

Riverside Drive, Jefferson City, Missouri. Any interested person may comment during the public hearing in support of or in opposition to the proposed rule. Written comments postmarked or received by October 19, 2015 will also be accepted. Written comments must be mailed to: Scott Weckenborg, MDNR Public Drinking Water Branch, P.O. Box 176, Jefferson City, MO 65102, or hand-delivered to the Lewis and Clark State Office Building, 1101 Riverside Drive, Jefferson City, Missouri.